

Regions, Range and Redundancy

Correlating chorology and taxonomy in marine gastropods

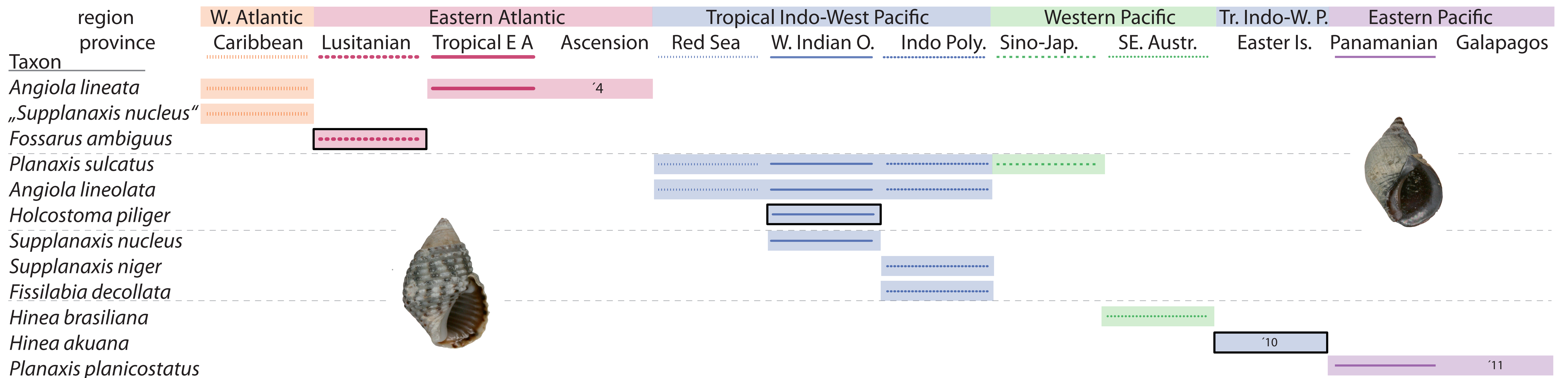
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Biogeography of Planaxidae

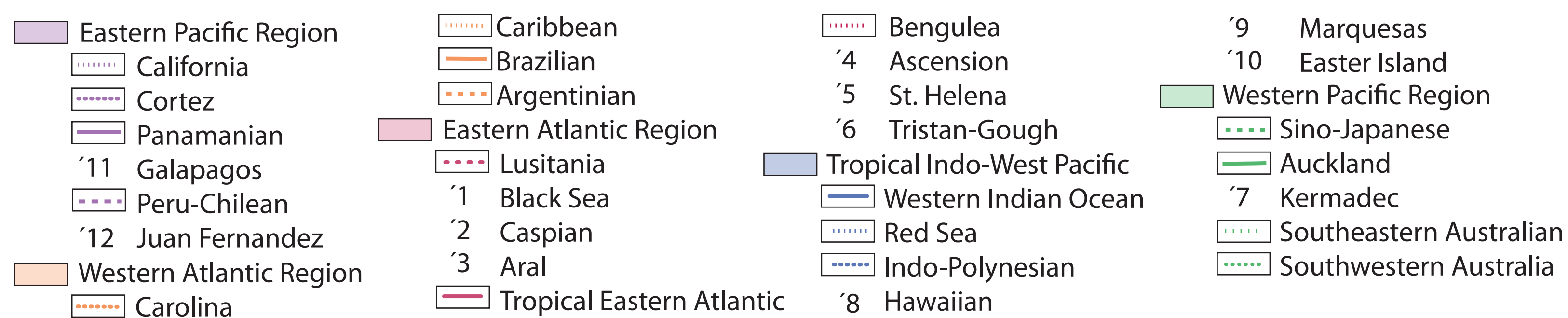
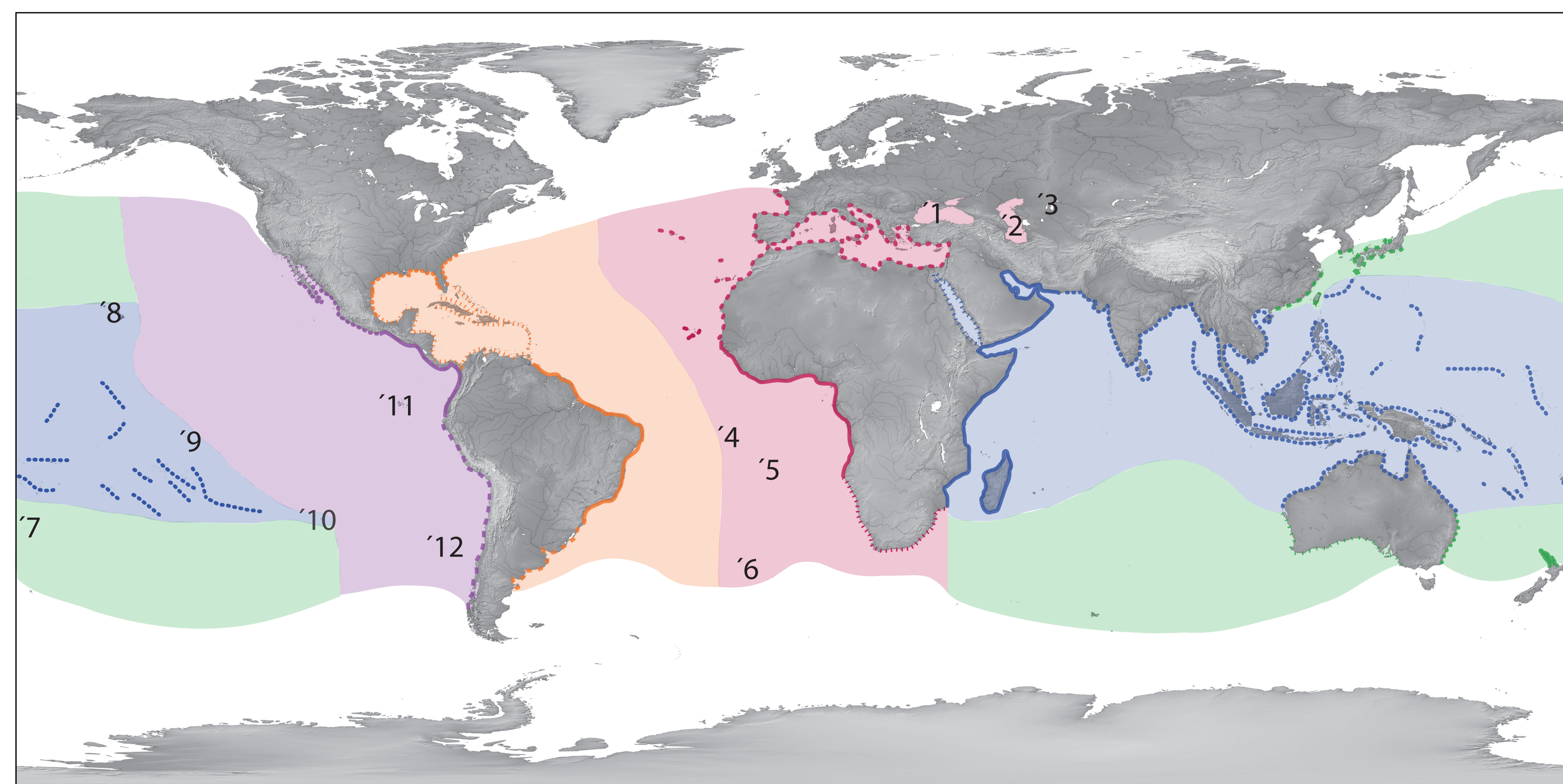
Our current revision of this littoral gastropod family validates at least 12 species comprised in 7 genera. We reconstructed the distribution of these species by compiling data from all relevant museum collections.



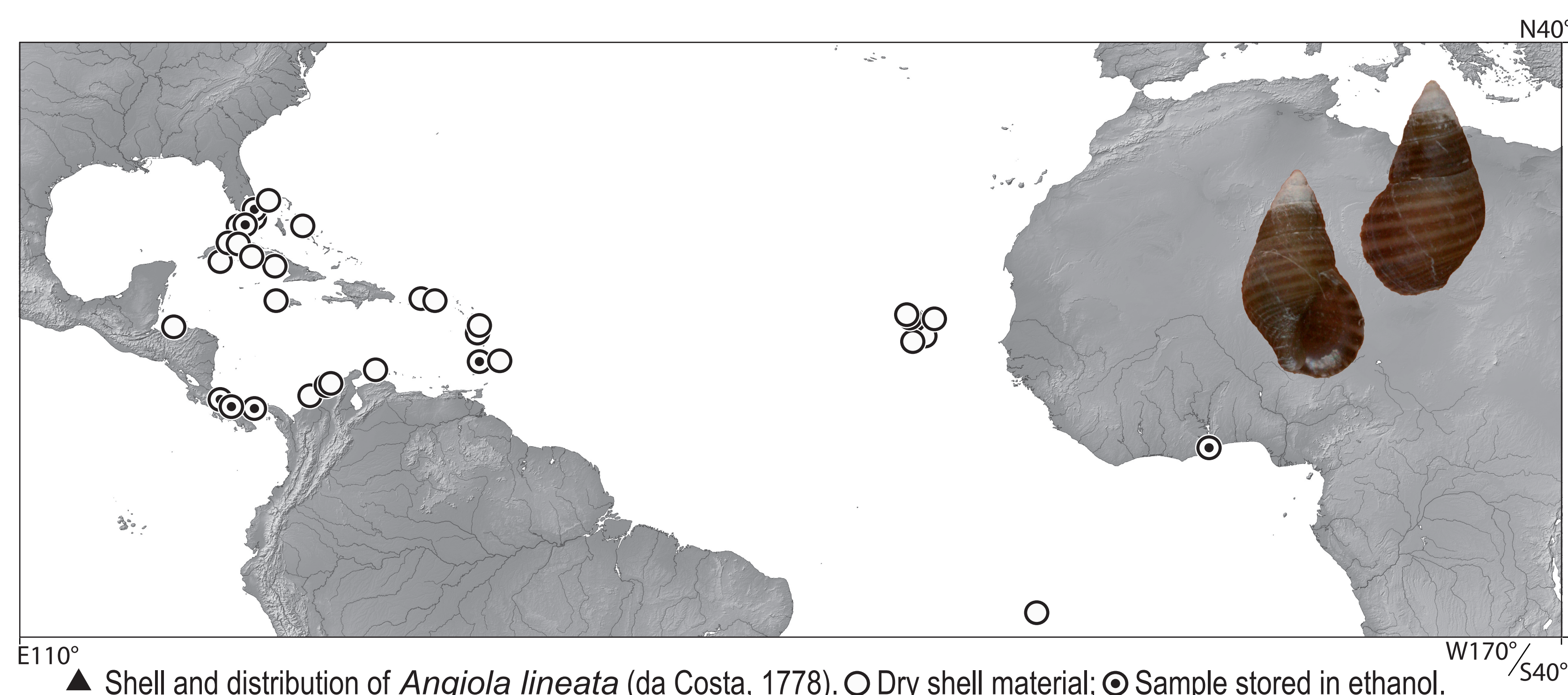
▲ Occurrence of species by provinces. Bars with black outline indicate endemism on an island or island group within a single province. Regions and provinces adapted from Briggs & Bowen (2012) (see below).

Marine Regionalisation

We adapted the marine regionalisation from Briggs & Bowen (2012) to test if the reconstructed distribution of the planaxid species fit into this scheme.



Although Briggs & Bowen's (2012) regionalisation is mainly based on vertebrate data, the planaxids strengthen their suggestion. Only *Angiola lineata* with an unusual transatlantic distribution is in discordance with this.

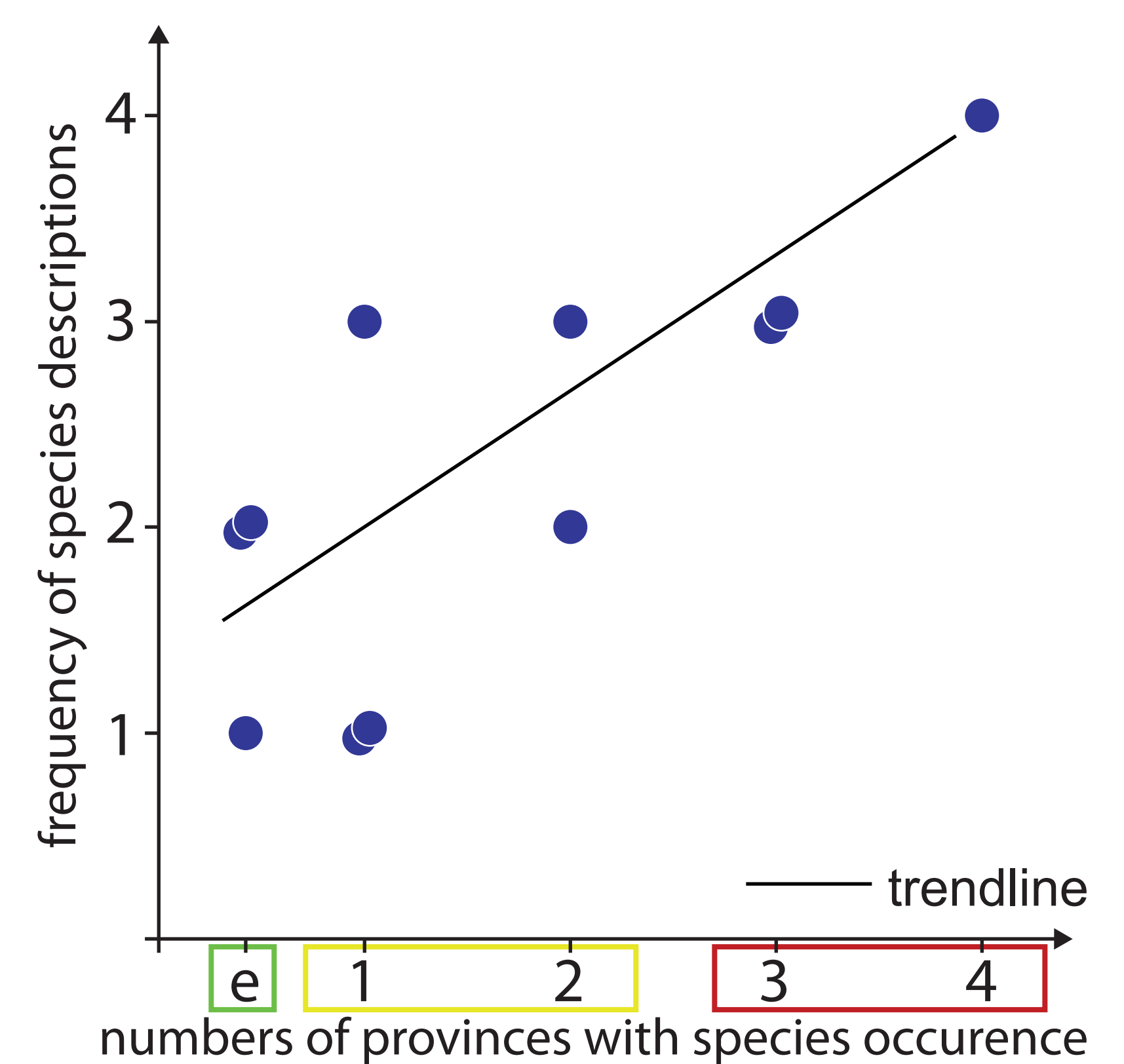


▲ Shell and distribution of *Angiola lineata* (da Costa, 1778). ○ Dry shell material; ⊙ Sample stored in ethanol.

Taxonomic Redundancy

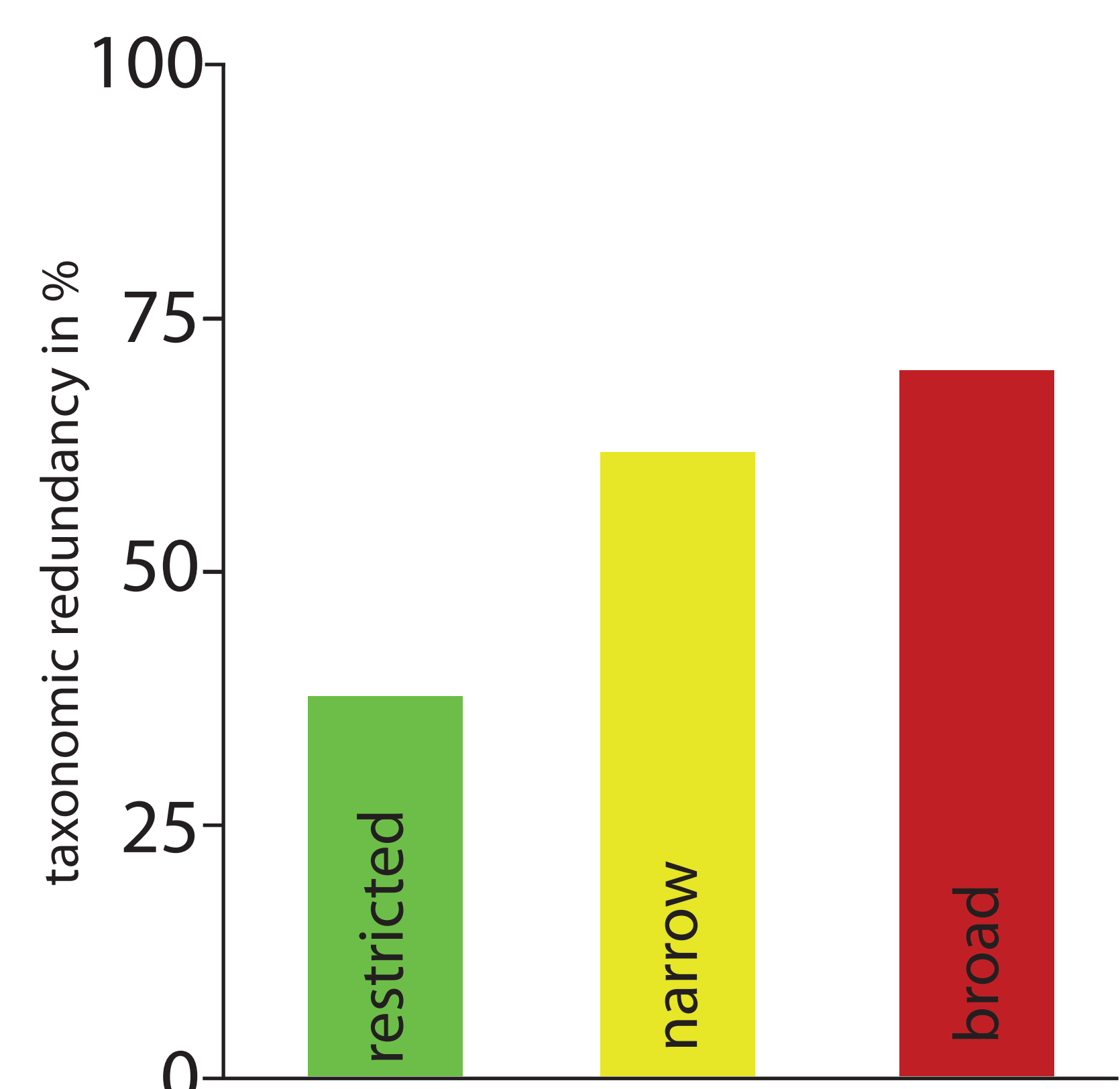
= rate of redundant descriptions for one group or species

The Planaxidae show a strong correlation between broad distribution and repeated description of the same species.



▲ Species endemic (e); each dot represents a planaxid species.

Based on the occurrence of a species within a province we formed three range categories; viz. wide: >3 provinces, narrow: 1-2 provinces, restricted: endemic to a single island or island groups within a province.



Our data of the planaxids affirms the assumption that species with wider distribution tend to be described more often than species with narrow or even restricted range.